

A NEW SPECIES OF OREOWEISIA FROM MEXICO

(DICRANACEAE, MUSCI)

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The genus Oreoweisia is of world wide distribution with the greatest concentration of species in Latin America. The Mexican representatives of the genus, for unknown reasons, have been very late coming to the attention of bryologists. The South American O. ligularis Mitt. was listed by Crum (1951) from Jalisco and by Delgadillo M. (1971) as O. bogotensis (Hampe) Mitt. from the volcanoes Nevada de Toluca and Popocatepetl (State of Mexico) and Ixtaccíhuatl (State of Puebla). A second Mexican species, O. mexicana H. Robins., was described as new in 1965 from the State of Guerrero. More recent collections of Oreoweisia have now appeared that seem to be a third and previously undescribed species from Mexico.

The new species is the first from Mexico having smooth rather than papillose or mamilllose leaf cells. The appearance is rather close to O. mexicana but that species has the additional differences of broader capsules with urns half as wide as long and larger spores 25-30 $\mu$  in diameter. A Bolivian species, O. tunariensis Herz., has described features most similar to the new species from Mexico, but the former has more linear leaves, smaller spores (15-20 $\mu$ ), and the median cells of the leaf are distinctly larger than those at the margin.

Oreoweisia delgadilloi H. Robinson & F. D. Bowers, sp. nov.

Plantae parviccae dense caespitosae ca. 2 cm altae virides inferne albo- vel rufo-tomentosae; folia sat laxe inserta sicca contorta humida erecto-patentia anguste oblonga plerumque ca. 3 mm longa et 0.6-0.7 mm lata margine plana vel leniter recurvata inferne integra superne sensim distincte serrulata apice breviter acuta supra et subtus laevia, cellulis mediis plerumque subquadratis vel brevioribus 10-17 $\mu$  latis 7-12 $\mu$  longis basilaribus sensim leniter longioribus prope costam usque ad 50 $\mu$  longis, parietibus basilaribus interioribus leniter tenuioribus, costis

<sup>1</sup> Study supported in part by the Richards Foundation

<sup>2</sup> Contribution from the Botanical Laboratory, The University of Tennessee, N.S. no. 420.

subpercurrentibus inferne ca. 100 $\mu$  latis. Folia perichaetialia similaria plerumque 2-3 mm longa inferne laxe convoluta, cellulis basilaribus valde laxioribus. Calyptrae cucullatae ca. 2.5 mm longae laeves. Setae 5-6 mm longae flavae laeves; opercula breviter rostrata ca. 0.5 mm longa; thecae anguste ovali-oblongae plerumque 1.2-1.3 mm longae ca. 0.4 mm latae flavae vel luteae sub orificio parum constrictae anguste rufescentes; dentes rubescentes ca. 250 $\mu$  longi laeves superne ad medium irregulariter fenestrati; sporae 20-25 $\mu$  diam. ovales perminute papillosoe.

Type: MEXICO: Durango: Hanging on side of cliff, partial shade, meso., ridge. Oak-pine forest with Madroño along Hwy. 40 about 9 miles west of La Ciudad. 8,650 ft., 30 Dec. 1973. Bowers, Delgadillo M., & Somers 5075 (US, holotype; TENN, isotype). Paratypes: MEXICO: Durango: Oak-pine forest with large exposed boulders (granite?) along Hwy. 40 about 4 miles west of La Ciudad. 8900 ft., 30 Dec. 1973. Bowers, Delgadillo M., & Somers 5264-h; On moist, rather sunny rocks. In pine, oak, and juniper forest on flat top of ridge along Hwy 40 about 9 miles west of La Ciudad. Elev. ca. 8500 ft., 26 Dec. 1971. Norris et al 20792 (TENN & Herb. NORRIS); Chihuahua: On soil, partial shade, meso., slope. Oak-pine forest and stream with cliff (limestone) and rocks. 37 miles north of Creel (16 min. north of San Juanita) on road from Creel to La Junta (Hwy. 16). 8000 ft., 4 Jan. 1974. Bowers, Delgadillo M., & Somers 5395 (US, TENN).

The new species is named after Dr. Claudio Delgadillo M., bryologist on the staff of the Instituto de Biología, U.N.A.M. Ciudad Universitaria in Mexico.

#### Literature Cited

- Crum, H. A. 1951. The Appalachian-Ozarkian element in the moss flora of Mexico with a check-list of all known Mexican mosses. Ph.D. dissertation. Univ. Michigan, Ann Arbor.
- Delgadillo M., C. 1971. Phytogeographic studies on alpine mosses of Mexico. The Bryologist 74: 331-346.
- Robinson, H. 1965. Notes on Oreoweisia and Hypnella from Latin America. The Bryologist 68: 331-334.